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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,331	01/22/2002	Collin A. Rich	10989-006	4772

7590 12/09/2004

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EXAMINER	
OEN, WILLIAM L	

ART UNIT	PAPER NUMBER
2855	

DATE MAILED: 12/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/054,331	RICH ET AL.	
	Examiner	Art Unit	
	William L Oen	2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 November 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-36* is/are pending in the application.

4a) Of the above claim(s) --- is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 and 3-36 stand rejected under 35 U.S.C. 103(a) as being unpatentable over either Neukermans (U.S. Patent No. 6,068,589), Lesinski et al. '787 (U.S. Patent No. 5,531,787), or Lesinski et al. '859 (U.S. Patent No. 5,984,859) in view of Zavracky (U.S. Patent No. 5,909,280).

Neukermans, Lesinski et al. '787, and Lesinski et al. '859 each explicitly teaches all of the essential features of the claimed implantable micro-fabricated sensor device including a substrate with a sensor integrally formed thereon, and in turn a conductive path formed on the substrate and sensor, as well as active circuitry close to and electrically connected to the sensor. It is noted that Neukermans, Lesinski et al. '787, and Lesinski et al. '859 do not explicitly teach that the sensor is a cap layer formed of boron doped silicon. Zavracky, in the same field of endeavor as Neukermans, Lesinski et al. '787, and Lesinski et al. '859, teach micro-fabricated sensors that do (at least *inherently*) teach devices wherein their respective sensors can be a cap layer formed of boron doped silicon. In view of the teaching by Zavracky, it would have been obvious to one having ordinary skill in the art at the time of the invention to have formed in the implantable micro-fabricated sensor systems of either Neukermans, Lesinski et al. '787, or Lesinski et al. '859, the sensor as a cap layer formed of boron doped silicon, if desired. This is further obvious because such a modification would be simple and expeditious. This is still further obvious because capacitive type sensors are notoriously well known in the sensor micro-fabrication art.

It is again noted that Neukermans, Lesinski et al. '787, and Lesinski et al. '859 each explicitly teach all of the essential features of the claimed implantable micro-fabricated sensor device including a substrate with a sensor integrally formed thereon, a conductive path formed on the substrate and sensor, and active circuitry in proximity to and electrically connected to the sensor. It is further noted, however, that neither

Neukermans, Lesinski et al. '787, nor Lesinski et al. '859 explicitly teach that the sensor is a capacitive type sensor, per se.

Zavracky, in the same field of endeavor as Neukermans, Lesinski et al. '787, and Lesinski et al. '859, however, does explicitly teach a micro-fabricated sensor that is operative as a capacitive type sensor (see, e.g., columns 10, 15, and 16 and Figure 13 of Zavracky). In view of this explicit teaching by Zavracky, and because it would involve but a simple & expedient substitution, it would have been obvious to one having ordinary skill in the art at the time of the invention to have formed the sensor of Neukermans, Lesinski et al. '787, or Lesinski et al. '859 as a capacitive type sensor, if desired.

The use of a "bio-compatible" material, a cap, and plastic as a material in the implantable micro-fabricated sensor device of Neukermans, Lesinski et al. '787, or Lesinski et al. '859 as modified in the manner hereinabove by the teaching of Zavracky are considered to have been mere matters of obvious design choice clearly within the purview of one having ordinary skill in the art at the time of the invention, if desired. These are obvious because they are notoriously well known and widely used in the sensing art and are herein considered to have been simple and expedient modifications.

It is finally noted that although Zavracky teaches an "optical" sensor rather than a capacitive sensor, a detailed examination of the patent to Zavracky shows that while "optical", it operates as a capacitive pressure sensor, i.e., "it senses a capacitance corresponding to a physical parameter" (see, e.g., Figure 13 and columns 15 and 16 of Zavracky).

Conclusion

This is an RCE of applicant's earlier Application of the same serial number. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William L Oen whose telephone number is 571-272-2186. The examiner can normally be reached on 10:30 am - 9:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-4900.

William L Oen
Primary Examiner
Art Unit 2855

WLO
December 7, 2004